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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,821	01/19/2001	Tue Nguyen	SIM070	9855

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FLIESLER MEYER, LLP
FOUR EMBARCADERO CENTER
SUITE 400
SAN FRANCISCO, CA 94111

EXAMINER

SENF1, BEHROOZ M

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/765,821	Applicant(s) NGUYEN ET AL.	
	Examiner Senfi	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-30 and 32-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-30, 32-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's arguments (filed July 23, 2004) with respect to claims 1 - 33 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment (filed July 23, 2004) amends claims 1, 3 - 10, 12 - 30, 32 - 33, and added new claims 34 - 49 and canceled claim 11 and 31.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 - 4, 12 - 14, 18 - 24 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smargiassi et al (US 2001/0043735) in view of Kaye et al (US 5,471,299).

Regarding claims 1, 24 and 47, Smargiassi '735 discloses "a system to capture images of a chamber" (i.e. fig. 2) and "a radiation source to generate radiation to illuminate the chamber" (page 3, section 0032) and "a camera coupled to the process chamber" (i.e. fig. 2, camera 34) and "the processor coupled to the camera" (i.e. fig. 2, processor 40). Smargiassi '735 fails to explicitly show "sensor that can detect at least one triggering condition in the processing chamber" . However, such features are well known and used in the prior art of the record as evidenced by Kaye '299 (i.e. col. 3, lines 53+). Therefore, taking the combined teaching of Smargiassi and Kaye as a

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whole, it would have been obvious to advantageously include triggering sensor in the processing system of Smargiassi as taught by Kaye for activating the camera.

Regarding claims 2 - 4, combination of Smargiassi and Kaye teach, "radiation source comprising one or more lamps" (i.e. col. 3, section 0032 of Smargiassi), and "processor coupled to the camera in claim 3" (i.e. fig. 2, processor 40 and controller 42 of Smargiassi and fig. 3 of Kaye) and "data storage" (i.e. fig. 2, memory of Smargiassi).

Regarding claims 18 - 20, combination of Smargiassi and Kaye teaches, "radiation source is an ambient radiation" (page 1, section 0008, and page 3, section 0032).

Regarding claims 12 - 14, combination of Smargiassi and Kaye teach, "sensor coupled to processor" (CCD sensors, page 3, 0031 of Smargiassi) and "motor coupled to the camera to pan the camera in claim 13" (page 3, 0031 of Smargiassi), and "view port coupled to chamber" (page 2, lines 5 – 6, left column of Smargiassi).

Regarding claims 21 - 23, combination of Smargiassi and Kaye teach "imaging processor coupled to the camera to detect the at least one triggering condition" (i.e. fig. Fig. 3 of Kaya) and "determine the position" (figures 1 and 2 of Smargiassi '735).

4. Claims 15 – 17 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smargiassi et al (US 2001/0043735) in view of Kaye et al (US 5,471,299) further in view of Pirak et al. (US 5,400,771).

Regarding claims 15 – 17 and 49, combination of Smargiassi and Kaye teach, "capturing images of a chamber and coupled to processor and capture radiation

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illuminating, as discussed above.” combination of Smargiassi and Kaye fails to explicitly teach “light pipe projecting from out side with camera viewing inside”. However, such a monitoring setups are well known and used in the art as evidenced by Pirak '771 (figure 1), where it shows the camera and the light source are placed outside and pipe 18 including fiber-optic illumination guide and fiber-optic cable connected to the camera for illuminating and inspection purpose of inside. Monitoring setup and system of Pirak '771 is for use in medical and surgical fields. However using similar monitoring setup for industrial applications, like inspection applications would have been obvious.

5. Claims 5 – 10, 25 – 30, 32 – 42 and 48, are rejected under 35 U.S.C. 103(a) as being unpatentable over Smargiassi et al (US 2001/0043735) in view of Kaye et al (US 5,471,299) further in view of Bandaru et al. (US 2002/0024538).

Regarding claims 25, 33, 39 and 48, combination of Smargiassi and Kaye teach, “a system to capture an image from a semiconductor processing chamber based on the triggering condition” and “processor connected to the camera” and “data storage” as covered in claims 1 – 4 above. Combination of Smargiassi and Kaye fails to explicitly teach “communication through internet to a remote viewer”. However, such features are well known and used in the art as evidenced by Bandaru '538 (figures 1 and 10). Bandaru '538 teaches the communication network via network adapter, therefore taking the combined teaching of Smargiassi and Kaye and Bandaru '538 as a whole, it would have been obvious to modify the processing system of Smargiassi and Kaye as taught by Bandaru for transferring images through internet to a remote location.

Regarding claims 27 - 29, combination of Smargiassi and Kaye and Bandaru teach "imaging processor coupled to the camera to detect the at least one triggering condition" (i.e. fig. Fig. 3 of Kaya) and "determine the position" (figures 1 and 2 of Smargiassi '735) and "storing" (i.e. memory 38 of Smargiassi).

Regarding claims 26, 32 and 37, the limitations claimed are substantially similar to claim 25, and are the method of claim 25, therefore the ground for rejecting claim 25 also applies here.

Regarding claims 5 - 7, the limitations claimed are obvious over the combination teaching of Smargiassi and Kaye and Bandaru. Since in order to connect to Internet, the network adapter card is necessitated.

Regarding claims 8 - 10 and 30, combination of Smargiassi and Kaye and Bandaru teach, "server connected to internet" (i.e. fig. 7 of Bandaru).

Regarding claim 34, the limitations as claimed are substantially similar to claim 25 and are covered.

Regarding claims 35 - 36, combination of Smargiassi and Kaye and Bandaru teach, "wide area network" (i.e. fig. 7, 718 of Bandaru).

Regarding claim 38, combination of Smargiassi and Kaye and Bandaru teach, "component is at least one of a wafer" (i.e. abstract of Smargiassi).

Regarding claims 40 - 42, the limitations claimed are substantially similar to claim 25, therefore the ground for rejecting claim 25 also applies here.

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6. Claims 43 – 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smargiassi '735 and Kaye '299 and Bandaru '538 further in view of Jakobs et al (US 5,892,509).

Regarding claim 44, combination of Smargiassi and Kaye and Bandaru teach, server for communication through network (i.e. fig. 7 of Bandaru). But fails to explicitly teach “annotating the image verbally”. However, such features are well known and used in the prior art of the record as evidenced by Jakobs '509 (i.e. col. 6, lines 1 – 13). Therefore, taking the combined teaching of Smargiassi and Kaye and Bandaru and 'Jakobs, would make the limitation obvious to one skilled in the art.

Regarding claims 43, 45 – 46, the limitations claimed “ annotating textually and verbally” has been covered in claim 44.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

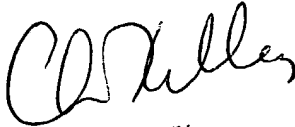
(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. J.

5/25/2004


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600